

AN APPARATUS FOR CREATING ACOUSTIC ENERGY IN A BALANCE
RECEIVER ASSEMBLY AND MANUFACTURING METHOD THEREOF

ABSTRACT OF THE DISCLOSURE

A paddle (142) of a diaphragm (118) of a receiver (100) is manufactured using one or more layers of a material selected for their inertial mass and rigidity. The paddle may have a layered structure with stiff outer layers such as aluminum and a less dense inner layer, such as thermoplastic adhesive. The inner and outer layers are selected to give an inertial mass matching that of an armature (124) of the receiver (100) and to give a lowest frequency bending resonance above a desired range, for example, 14 KHz.